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| APPLICATION NO.           | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-------------|----------------------|---------------------|------------------|
| 10/788,668                | 02/27/2004  | Mahesh Chowdhary     | ACCU.P0001          | 3587             |
| 23349                     | 7590        | 09/22/2005           | EXAMINER            |                  |
| STATTLER JOHANSEN & ADELI |             |                      | WEISKOPF, MARIE     |                  |
| P O BOX 51860             |             |                      | ART UNIT            |                  |
| PALO ALTO, CA 94303       |             |                      | PAPER NUMBER        |                  |

3661

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/788,668             | CHOWDHARY ET AL.    |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Marie A. Weiskopf      | 3661                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02/27/2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

*HL*

*AK*

### DETAILED ACTION

1. Claims 1-28 have been examined.

#### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

3. The disclosure is objected to because of the following informalities:
  - Page 13, line 17 – Examiner suggests that “feed” should be “fed”.
  - Page 14, line 3 – “...flow diagram illustrating on embodiment...”, examiner suggest “...flow diagram illustrating *one* embodiment...”
  - Page 24, line 3 – “...the process the speeding...” is missing a word, examiner suggests “...the process *of* speeding...”
  - Page 30, line 3 – after “displayed.” There is an extra ‘.’ Examiner suggests removing.
  - Page 30, line 15 – “...generate an speed limit...” should be “...generate a speed limit...”
  - Page 32, line 2 – After “..., etc.”, the parenthesis and period (“).”) need to be removed.
  - Page 37, line 7 – “The portion of the report...” does not seem to make sense. Examiner suggest “The *top* portion of the report...”

Appropriate correction is required.

***Claim Objections***

4. Claims 10 and 24 are objected to because of the following informalities:
- "...wherein an unsafe driving event frequent lane changes." is missing a word. Examiner suggests changing to "...wherein an unsafe driving event *comprises* frequent lane changes."

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Levine (US 6,502,035.) Levine discloses an automotive safety enhancing system comprising:

- In regards to claim 1, a method for detecting safe driving behavior in a vehicle which includes
  - Defining a plurality of unsafe driving events, wherein an unsafe driving event characterizes movement of a vehicle in a manner that indicates unsafe driving. (Column 2, lines 9-19)
  - Acquiring vehicle data for a plurality of parameters associated with movement of the vehicle. (Column 2, lines 9-19)

- Processing the data in order to determine whether the movement meets one or more pre-determined conditions. (Column 2, lines 9-19)
  - Generating event data for one or more unsafe driving events if the processed vehicle data meets the pre-determined conditions.  
(Column 2, lines 9-19)
- In regards to claim 2, generating one or more unsafe driving events comprises transmitting, to a receiver remote from the vehicle, data for an unsafe driving event after the event is detected. (Column 2, lines 15-19)
- In regards to claim 3, generating one or more unsafe driving events comprises transmitting data for an unsafe driving event only during specified time periods. (Column 2, lines 49-62) Levine discusses sending the unsafe driving event whenever the time interval is up and reckless driving has been determined. Inherently, this is sending the unsafe driving event only at specified times.
- In regards to claim 4, transmitting data for an unsafe driving event to an application server and generating one or more reports to characterize unsafe driving behavior for the vehicle. (Column 2, lines 49-62) The processor-counter is inherently performing the same function as the application server and is the same.

- In regards to claim 5, acquiring vehicle data for a plurality of parameters associated with the movement of the vehicle comprises sensing the movement. (Column 2, lines 20-23)
- In regards to claim 6, sensing the angular rate of the yaw axis for the vehicle with a gyroscope. (Column 10, lines 11-14)
- In regards to claim 7, sensing acceleration in lateral and longitudinal axes of the vehicle with accelerometers. (Column 2, lines 22-24)
- In regards to claim 8, acquiring data from a global positioning system receiver. (Column 4, lines 1-2)
- In regards to claim 9, an unsafe driving event comprises tailgating. (Column 3, lines 1-18)
- In regards to claim 10, an unsafe driving event comprises frequent lane changes. (Column 3, lines 1-13)
- In regards to claim 11, an unsafe driving event comprises a speed limit violation. (Column 5, lines 47-53)
- In regards to claim 12, an unsafe driving event comprises a speed limit violation over a curved segment of road. (Column 10, lines 18-21)
- In regards to claim 13, an unsafe driving event comprises a rapid acceleration from a start. (Column 5, lines 16-30)
- In regards to claim 14, an unsafe driving event comprises a rapid deceleration to a stop. (Column 5, lines 16-30)

- In regards to claim 15, a system for detecting safe driving behavior in a vehicle which includes:
  - A plurality of unsafe driving events, where an unsafe driving event characterizes movement of a vehicle in a manner indicative of unsafe driving behavior. (Column 2, lines 9-19)
  - A circuit for acquiring vehicle data for a plurality of parameters associated with movement of the vehicle. (Column 2, lines 20-34)
  - A processor, coupled to the circuit, for processing vehicle data in order to determine whether the movement of the vehicle meets one or more pre-determined conditions and for generating even data for one or more unsafe driving events. (Column 2, lines 20-34).
- In regards to claim 16, a transmitter for transmitting, to a receiver remote from the vehicle, data for an unsafe driving event after the unsafe driving event is detected. (Column 2, lines 15-19, lines 52-57)
- In regards to claim 17, a transmitter for transmitting, to a receiver remote from the vehicle, data for an unsafe driving event only during specified time periods. (Column 2, lines 49-62) Levine discusses sending the unsafe driving event whenever the time interval is up and reckless driving has been determined. Inherently, this is sending the unsafe driving event only at specified times.
- In regards to claim 18, the system also having:
  - An application server

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- A transmitter for transmitting data for an unsafe driving event to the application server
- The application server for generating one or more reports to characterize unsafe driving behavior for a vehicle. (Column 2, lines 49-62)

The processor-counter is inherently performing the same function as the application server and is the same.

- In regards to claim 19, the circuit for acquiring vehicle data comprises one or more movement sensors. (Column 2, lines 20-22)
- In regards to claim 20, the sensor comprises a gyroscope for sensing the angular rate for the yaw axis. (Column 10, lines 11-14)
- In regards to claim 21, the sensor comprises a plurality of accelerometers for sensing acceleration in lateral and longitudinal axes. (Column 2, lines 22-24)
- In regards to claim 22, the circuit for acquiring vehicle data has a global positioning system receiver. (Column 4, lines 1-2)
- In regards to claim 23, an unsafe driving event comprises tailgating. (Column 3, lines 1-18)
- In regards to claim 24, an unsafe driving event comprises frequent lane changes. (Column 3, lines 1-13)
- In regards to claim 25, an unsafe driving event comprises a speed limit violation. (Column 5, lines 47-53)



- In regards to claim 26, an unsafe driving event comprises a speed limit violation over a curved segment of road. (Column 10, lines 18-21)
- In regards to claim 27, an unsafe driving event comprises a rapid acceleration from a start. (Column 5, lines 16-30)
- In regards to claim 28, an unsafe driving event comprises a rapid deceleration to a stop. (Column 5, lines 16-30)

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Pat. No. 6,556,905 to Mittelsteadt et. al. discloses a vehicle monitoring arrangement that tracks and records vehicle operation.
- U.S. Pat. No. 6,823,244 to Breed discloses a control system for controlling sensors on a vehicle, specifically including accelerometers, gyroscopes, GPS receivers, etc.
- U.S. Pat. No. 5,570,087 to Lemelson discloses a system and method for monitoring the performance of a vehicle. The acceleration in at least two directions are continually sensed and stored.
- U.S. Pat. No. 6,873,253 to Veziris discloses a device for warning drivers of automobiles of excessive speeds around bends and curves.
- U.S. Pat. No. 5,499,182 to Ousborne discloses a vehicle driver performance monitoring system.


- U.S. Pat. No. 6,720,889 to Yamaki et. al. discloses a traffic violation warning system and also a traffic violation warning apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie A. Weiskopf whose telephone number is (571) 272-6288. The examiner can normally be reached on Monday-Friday between 7:00 AM and 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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THOMAS S. BLACK  
SUPERVISORY PATENT EXAMINER  
GROUP 3600